



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

09/941,313

08/29/2001

Robert J. Burnham

10541-451

6595

29074

7590

08/06/2008

VISTEON/BRINKS HOFER GILSON & LIONE

524 South Main Street

Suite 200

Ann Arbor, MI 48104

EXAMINER

GENACK, MATTHEW W

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

08/06/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/941,313	Applicant(s) BURNHAM ET AL.	
	Examiner MATTHEW W. GENACK	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3-6, and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brice *et al.*, U.S. Patent Application Publication 2003/0012389, in view of Hollenbeck *et al.*, U.S. Patent No. 5,886,738, further in view of Beamish *et al.*, U.S. Patent No. 6,653,932.

Regarding Claims 1, 4, 6, and 9, Brice *et al.* discloses an automobile audio system that comprises a transmitter, connected to one of a plurality of audio sources (such as a CD or audio cassette), and a plurality of receivers that receive audio signals broadcasted throughout the automobile by said transmitter (Abstract, [0012]-[0013], [0016], Fig. 1). The automobile may be a car ([0043]). It is inherent that a car comprises a passenger compartment as well as a lamp assembly affixed to the roof of said passenger compartment, said lamp assembly comprising a lens and housing as well as a light source connected to a power source. A pair of wireless headphones, comprising touch sensing input devices, is used to receive the wireless signals and convert said signals into sound ([0014], [0038], Fig. 3).

Brice *et al.* does not expressly disclose the placement of transmitters in the lamps, said transmitters connectable to the audio source and adaptable to receive information, either analog or digital, from said audio source and to transmit signals containing said information, whereby the transmitter is separate from the light source and whereby there is an unobstructed space between the transmitter and the lamp's lens.

Hollenbeck *et al.* discloses an apparatus that is concealed within a street lamp, said apparatus used for remote surveillance (Abstract, Column 2 Lines 48-63, Figs. 4-5). There is an unobstructed space between the controller-receiver-transmitter-antenna assembly and the lens (Column 7 Lines 53-65, Figs. 6A-6B). The video stream is digital (Column 11 Lines 3-17). Therefore, it is inherent that the camera contains a A/D converter.

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Brice *et al.* by placing RF transmitters in the lamp assembly, said transmitters connected to the audio source and adaptable to receive information, either analog or digital, from said audio source and to transmit signals containing said information.

One would have been motivated to make this modification because the concealment of the camera and transmitter is desirable in public places (Hollenbeck *et al.*: Column 1 Lines 21-38).

Neither Brice *et al.* nor Hollenbeck *et al.* expressly discloses the placement of a transmitter within a lamp such that there is a first direct line of

Art Unit: 2617

sight between the transmitter and the lens and a second direct line of sight between the light source and the lens.

Beamish *et al.* discloses the placement of an antenna within a lightbulb such that said antenna and the filament of said light bulb are connected in parallel, whereby there is a direct line of sight between the antenna and the light bulb's lens and another direct line of sight between said filament and the light bulb's lens (Column 5 Lines 29-47, Fig. 1B).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Brice *et al.* as modified by Hollenbeck *et al.* by placing the RF transmitter within the lamp assembly such that there is a first direct line of sight between the RF transmitter and the lens and a second direct line of sight between the light source and the lens.

One would have been motivated to make this modification in order to avoid the high amount of attenuation caused when there is not a direct line of sight between the transmitter and the receiver (Beamish *et al.*: Column 1 Line 46 to Column 2 Line 8).

Regarding Claims 3 and 8, the transmitter may modulate the audio information on a carrier in the infrared region of the spectrum ([0046]).

Regarding Claims 5 and 10, the audio sources are connected to the transmitter via wires ([0017], Fig. 1).

3. Claims 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brice *et al.* in view of Hollenbeck *et al.*, further in view of Beamish *et al.*, further in view of Leeb, U.S. Patent No. 6,426,599.

Neither Brice *et al.*, nor Hollenbeck *et al.*, nor Beamish *et al.* expressly discloses the use of LED transmitters and infrared transmitters.

Leeb discloses a dual-use electronic transceiver for wireless data networks, whereby information is transmitted by modulating the AC input waveform to a lamp, and said information is detected by a receiver adapted to detect the variations, imperceptible to the human eye, of the light emitted from the lamp (Abstract, Column 1 Lines 22-31, Column 3 Lines 35-64, Figs. 1, 7, and 10). Audio information, either analog or digital, may be sent to the transceiver from sources such as tape recorders, microphones, and stereos (Column 1 Lines 31-35, Column 8 Lines 49-56, Fig. 1). The lamp may also emit electromagnetic radiation in the infrared portion of the spectrum, and a light emitting diode may be used as the lamp (Column 3 Line 65 to Column 4 Line 9).

At the time that the invention was made, it would have been obvious to one of ordinary skill in the art to modify the invention of Brice *et al.* as modified by Hollenbeck *et al.* as modified by Beamish *et al.* by providing for the use of lamps containing LED and infrared light sources.

One of ordinary skill in the art would have been motivated to make this modification in order to expand the range of lamps that may be used to conceal RF transmitters.

Response to Arguments

Art Unit: 2617

4. Applicant's arguments with respect to Claims 1-10 have been considered but are moot in view of the new grounds of rejection necessitated by Applicant's amendment, filed 14 April 2008.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew W. Genack whose telephone number is 571-272-7541. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc Nguyen can be reached on 571-272-7503. The fax

Art Unit: 2617

phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew W Genack/

Examiner, Art Unit 2617

/Duc Nguyen/

Supervisory Patent Examiner, Art Unit 2617